IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

WISCONSIN ALUMNI RESEARCH FOUNDATION,)
Plaintiff,))
V.	Case No. 14-cv-00062-WMC
APPLE, INC.,) FILED UNDER SEAL
AFFLE, INC.,) CONTAINS INFORMATION
Defendants.	SUBJECT TO PROTECTIVE
	CRDER

DECLARATION OF CATHARINE M. LAWTON IN SUPPORT OF WARF'S MOTION FOR AN ACCOUNTING, SUPPLEMENTAL DAMAGES THROUGH THE DATE OF JUDGMENT, PREJUDGMENT INTEREST AND POST-JUDGMENT INTEREST

- I, Catharine M. Lawton, hereby declare:
- 1. I am over the age of twenty-one (21), of sound mind, and competent to make this declaration. I am also qualified to give testimony under oath. Each of the facts listed below is within my personal knowledge and is true and correct.
- 2. I am a Managing Director at Berkeley Research Group, LLC, a leading international consulting firm that specializes in advising companies and counsel regarding the economic, financial, valuation and strategy issues related to complex business problems, disputes and litigation. I hold a Bachelor of Science degree in finance from the University of Illinois and have more than 30 years of experience in this field.
- 3. I testified as the expert witness on damages for Wisconsin Alumni Research Foundation ("WARF") in the above-captioned patent infringement litigation, which resulted in a verdict for WARF on October 16, 2015 and the entry of judgment on October 26, 2015.
- 4. I make this declaration in support of WARF's Motion for An Accounting, Supplemental Damages Through the Date of Judgment, Prejudgment Interest and Post-Judgment Interest.
 - 5. In preparing this declaration, I interviewed the following WARF employees:
 - Steve Mixtacki, WARF Chief Financial Officer
 - Carrie Thome, WARF Chief Investment Officer
 - Jon Mecoli, WARF Senior Investment Analyst

I also reviewed certain documents and other materials, including WARF internal documents, Apple internal documents, and public materials. The materials I am relying on are cited throughout this declaration.

A. Supplemental Damages Through Judgment on October 26, 2015

- 6. At trial, both sides presented the jury with a stipulated number of accused devices containing A7, A8 and/or A8X processors sold by Apple from the period January 31, 2014 (filing of the complaint) through June 27, 2015, close of the last fiscal quarter for which Apple provided sales data. That number totaled units including those containing chips fabricated by Samsung in Austin, Texas (which the jury found to infringe). The jury awarded damages in the amount of \$234,277,669.00 (Dkt. 642), on which the Court entered judgment (Dkt. 657). Dividing the total damages award by the total number of units the jury found infringing results in a reasonable royalty rate of per infringing unit.
- 7. I have been asked to calculate the number of additional infringing units sold by Apple from June 28, 2015 through the date of entry of judgment on October 26, 2015 and the corresponding supplemental damages based on the effective royalty rate applied by the jury (as determined above).
- 8. On November 4th, 2015, Apple produced updated summaries of its sales,

 APL-WARF_0001751719 ("US SALES_IPHONE", "US SALES_IPAD"),

 WARF_0001751720 ("WW SALES_IPHONE", WW SALES_IPAD"). On November

 13, 2015, Apple produced an additional summary, APL-WARF_0001751776-778

 ("Shipments from US"). These summaries reflect sales of certain Apple products during Apple's fiscal fourth quarter of 2015, which covers the period from June 28, 2015 through September 26, 2015. This is an update of the unit reporting documents that Apple produced during the course of discovery and on which I (as well as Apple's expert, Ms. Davis) relied to determine the number of units subject to damages.

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9. Using the data provided by Apple, I have determined the number of infringing devices containing A7, A8 or A8X chips sold by Apple during the period June 28 through September 26, 2015 and the amount of supplemental damages due WARF. Details of my calculations are set forth in **Exhibit A** attached hereto, and are summarized in the following table:



10. For the period from September 27, 2015 through October 26, 2015 (date of entry of judgment), Apple contends that it cannot provide data on the number of units sold because such data is allegedly available only after the close of its applicable calendar quarter. This position is inconsistent with my observations of Apple's sales tracking capabilities. For example, on Monday September 28, 2015, Apple reported that it has sold "more than 13 million new iPhone 6s and iPhone 6s Plus models, a new record, just three days after launch." *See* Exhibit B. Apple made similar announcements regarding sales

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¹ "Apple Announces Record iPhone 6s & iPhone 6s Plus Sales," *Apple*, September 28, 2015, *available at* http://www.apple.com/pr/library/2015/09/28Apple-Announces-Record-iPhone-6s-iPhone-6s-Plus-Sales.html.

following launches of prior iPhone models as well.² *See* **Exhibit C**. Apple's ability to make public statements on the Monday following the "launch weekend" that disclose the number of units sold during the prior three days is consistent with my understanding that Apple has the ability to track sales of its products in substantially real-time. I discuss Apple's sales reporting in more detail in ¶¶ 32 to 43.

11. Because Apple has not yet provided the data regarding its sales of infringing units for the period September 27, 2015 through October 26, 2015, sales for this period are not included in my calculations above. If the Court directs Apple to provide an accounting of these units, or when Apple otherwise provides this information, I will provide updated calculations.

B. Prejudgment Interest

12. In order to calculate the amount upon which prejudgment interest should be calculated, I relied upon the available evidence of Apple's quarterly sales of the infringing units for each quarter of the damages period from January 31, 2014³ to September 26, 2015 (with the assumption that damages should include the period through the judgment date of

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² See, e.g., "First Weekend iPhone Sales Top 10 Million, Set New Record," *Apple*, September 22, 2014, available at http://www.apple.com/pr/library/2014/09/22First-Weekend-iPhone-Sales-Top-10-Million-Set-New-Record.html ("Apple today announced that it sold over 10 million new iPhone 6 and iPhone 6 Plus models, a new record, just three days after the launch on September 19."). "First Weekend iPhone Sales Top Nine Million, Sets New Record," *Apple*, September 23, 2013, available at http://www.apple.com/pr/library/2013/09/23First-Weekend-iPhone-Sales-Top-Nine-Million-Sets-New-Record.html ("Apple today announced it has sold a record-breaking nine million new iPhone 5s and 5c models, just three days after the launch of the new iPhones on September 20."). "iPhone 5 First Weekend Sales Top Five Million," *Apple*, September 24, 2012, available at http://www.apple.com/pr/library/2012/09/24iPhone-5-First-Weekend-Sales-Top-Five-Million.html ("Apple today announced it has sold over five million new iPhone 5, just three days after its launch on September 21, and more than 100 million iOS devices have been updated with iOS 6 ..."). "iPhone 5 First Weekend Sales in China Top Two Million," *Apple*, December 17, 2012, available at http://www.apple.com/pr/library/2012/12/16iPhone-5-First-Weekend-Sales-in-China-Top-Two-Million.html ("Apple today announced it has sold over two million of its new iPhone 5 in China, just three days after its launch on December 14.").

³ The first quarter of the damages period, December 29, 2013 through March 29, 2014 ("2QFY2015"), is only a partial period because the damages period begins upon filing of the complaint on January 31, 2014. As such the prejudgment interest calculation for 2QFY2015 is prorated to reflect that partial period.

October 26, 2015; Apple has not yet provided sales data for the period September 27, 2015 through October 26, 2015). My calculations do not include sales data after September 26, 2015 based on my understanding that Apple has not yet provided that data to WARF.

- 13. In order to determine the appropriate rate of prejudgment interest in this case, I considered the following:
- a. WARF's return on its endowment during the period February 1, 2014 through September 30, 2015: This data was provided to me by WARF's Senior Investment Analyst, Jon Mecoli.
- b. WARF's interest rate on the December 2009 WARF bond issue during the years 2014 and 2015: This data was provided to me by WARF and is reflected in the prospectus pursuant to which these bonds were issued. *See* Exhibit H, Bond Prospectus.
- c. The prime rate of interest during the period February 1, 2014 through October 31, 2015: 3.25%. I accessed this information from the Federal Reserve Bank's website.⁴
- d. The Apple-ARM Technology License Agreement, which Apple identified as relevant at trial, and which provides for quarterly payment of running royalties.

 Exhibit L, DX1292 at APL-WARF_0001446209 (providing for quarterly payments).
- e. WARF's standard form license agreements, which routinely provide for payments of running royalties on a quarterly basis. This includes, for example, the template agreement available on WARF's web site, DX1009. **Exhibit K** at APL-WARF_0000485732 (providing for royalty payments "on a quarterly basis").

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⁴ "Selected Interest Rates (Daily) – H.15," *Board of Governors of the Federal Reserve System, available at* http://www.federalreserve.gov/releases/h15/data.htm (*See* spreadsheets for "Bank prime loan").

- f. I also reviewed, with the assistance of WARF's counsel, federal case law regarding prejudgment interest rates.
- 14. I calculated prejudgment interest by applying the interest rate for each quarter to the royalty associated with the number of units Apple sold in that quarter, using the mid-quarter cash flow convention. Under this convention, the calculation assumes for each quarter that the payment is received in the middle of the quarter.
- 15. I calculated prejudgment interest compounded quarterly rather than, *e.g.*, daily or monthly for three reasons. *First*, I understand that compounding is routine in federal cases awarding prejudgment interest and I am aware of numerous patent-infringement cases in which prejudgment interest was compounded quarterly. *Second*, Apple's license agreements show that it paid royalties quarterly. *See* ¶ 13(d), *supra*. WARF's agreements likewise show that it expects to receive royalties quarterly. *See* ¶ 13(e), *supra*. *Third*, in my experience quarterly payments are typical in patent license agreements.
- 16. I have calculated prejudgment interest rate based on three different interest rates: (i) WARF's rate of return on its endowment during the damages period in this case; (ii) the interest rate WARF pays on bonds issued to finance construction of the Wisconsin Institutes of Discovery; and (iii) the prime rate, which also is a borrowing rate available to WARF under its existing line of credit with Northern Trust. In my opinion, the rate of return on WARF's endowment is the most relevant rate of prejudgment interest as it reflects the economic loss to WARF from having been deprived of the money Apple should have otherwise paid WARF on an ongoing basis. My understanding is that WARF typically invests net proceeds from licensing income in its Long-Term Portfolio fund ("LTP Fund"), which functions like an endowment, and then annually (and sometimes on other schedules)

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makes gifts to the University of Wisconsin, Madison from the LTP Fund to support research and education. Thus, had Apple taken a license and paid WARF on a quarterly basis, those funds would have been invested and earned a return along with the rest of WARF's LTP Fund.

1. WARF's Investment Return on the LTP Fund

17. I have calculated prejudgment interest based on WARF's investment rate of	
return on its LTP Fund. I understand that federal courts have used plaintiffs' investment	
returns as the metric for calculating prejudgment interest. I also understand that WARF	
invests the net revenues it receives in the LTP Fund, which is a diversified pool of	
investments intended to yield, on average over the long term, . See Exhibit I, WARF	
Investment Guidelines. For example,	
. Thus,	
returns on WARF's LTP Fund during the damages period reflect the most accurate measure	
of the value that WARF lost because Apple did not take a license and pay royalties.	

- 18. I understand that the actual quarterly rates of return that WARF earned on its LTP Fund have fluctuated over time, but the average annual return over for period February 2014 through September 2015 is
- 19. I have calculated prejudgment interest on the jury's verdict through the October 26, 2015 judgment date by applying WARF's average investment rate of return on the LTP Fund, to the royalty amount for each quarter during the period January 31, 2014 through September 26, 2015 for which Apple's sales data has been provided, compounded quarterly.

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20. Applying WARF's investment rate of return on the LTP Fund, as described in the preceding paragraphs, the resulting amount of prejudgment interest is

The periodic rates and calculations are contained in **Exhibit D**, attached hereto.

2. WARF Bond Rate

21. I have also calculated prejudgment interest based on the rate of interest paid by WARF on bonds that were issued in December 2009. I understand that federal courts have used plaintiffs' cost of debt as the metric for calculating prejudgment interest. I understand from WARF's Chief Financial Officer, Steve Mixtacki, that the interest rate on bonds issued in December 2009 and maturing in 2014, 2015 and 2016 is

- 22. I understand that the annual interest rates that WARF pays on the 2009 bonds varies over time, however, for the bonds maturing in 2014, 2015 and 2016, the interest rate is
- 23. I have calculated prejudgment interest on the jury's verdict through the October 26, 2015 judgment date by applying the annual interest rate that WARF pays on the 2009 bonds maturing in 2014 and 2015, to the royalty amount for each quarter during the period January 31, 2014 through September 26, 2015 for which Apple's sales data has been provided, compounded quarterly.
- 24. Applying WARF's bond interest rate, as described in ¶¶ 12 through 16, the resulting amount of prejudgment interest is ______. The periodic rates and calculations are contained in **Exhibit E**, attached hereto.

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3. Prime Rate

- 25. I have also calculated prejudgment interest based on the prime rate of interest. I understand that Courts and financial analysts routinely describe the prime rate as the "cost of money," and in this case, it reflects WARF's short-term borrowing costs. I understand that federal courts have used the prime rate to calculate prejudgment interest in numerous cases.
- 26. I have calculated prejudgment interest on the jury's verdict through the October 26, 2015 judgment date by applying the average prime rate of interest during the period February 2014 through October 2015, to the royalty amount for each quarter during the period January 31, 2014 through September 26, 2015 for which Apple's sales data has been provided, compounded quarterly.
- 27. The prime rate of interest been constant during the period February 2014 through October 2015 at 3.25%. The prime rate of interest is available on the Federal Reserve Bank's website.
- Applying the prime rate of interest, as described in \P 12 through 16, the resulting amount of prejudgment interest is \P The periodic rates and calculations are contained in **Exhibit F**, attached hereto.
- 29. A summary of my prejudgment interest calculations is set forth in **Table 2**, below:

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C. Availability of Apple Sales Data for Intra-Quarter Periods

- 1. Why Apple's Intra-Quarter Sales Data Matters Now to Determining Supplemental Damages for the Period from September 27, 2015 through October 26, 2015 Entry of Judgment
- 30. Apple has provided only limited sales information. For example, during discovery, Apple's sales information was provided as a summary (*i.e.*, *not* transactional data) *prepared for the litigation* on a *quarterly* basis, and *without SKU information*. Furthermore, Apple's document production included relatively few ordinary business course *financial* records.
- 31. Because Apple has provided only *quarterly* sales data, WARF does not have the ability to *precisely* measure sales for defined periods of time that are less than a quarter (*i.e.*, *intra-quarter* sales data). For example, the damages experts were required to estimate the sales for the initial damages period January 31, 2014 to March 27, 2014 (less than a full quarter—about 2 months of the 3 month quarter)—because Apple did not provide detailed, *transactional* sales data that is routinely provided in patent litigation. As a consequence of this data limitation, the damages experts used different methodologies to *estimate* sales during the initial damages period. The experts' estimates were materially different—although the parties agreed to stipulate to the number of units in the royalty base to address this issue and simplify the presentation at trial.

At this point, however, Apple has provided no data from which WARF could estimate sales of infringing devices during the period September 27, 2015 through October 26, 2015—about 1 month of Apple's 1QFY2016. By way of background, during discovery

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Apple produced summaries of its quarterly sales data through June 27, 2015 that included all or substantially all of its iPhone and iPad sales. On November 4, 2015 and November 13, 2015 (the "November 2015 Sales Summaries"), Apple provided a more limited summary that does not include all of its iPhone and iPad sales for the 4QFY2015 ended September 26, 2015. Rather, the November 2015 Sales Summaries include only 4QFY2015 sales of devices containing infringing A7, A8 and A8X chips. In connection with this motion, WARF is seeking Apple's sales data for part of 1QFY2016, namely, the period September 27, 2015 through October 26, 2015—the date the judgment was entered.

2. Background Information regarding Apple's Sales Reporting Systems

- i. 1998 Apple's SAP System Provides "Real-Time Online Access to Sales Information"
- 32. I understand that Apple's lawyers have stated that "Apple does not track sales data by day or month." This claim is inconsistent with my understanding of Apple's reporting systems. Starting in 1998, Apple moved to just-in-time ("JIT") sales and inventory management, concurrent with its implementation of an SAP Enterprise Resource Planning System (ERP). In January 1998, Apple kicked off its SAP R/3 implementation that went live on January 2, 1999. Apple's implementation partner was KPMG Consulting Inc.; the team consisted of 90 people including 35 KPMG consultants, at an estimated cost of \$45 million to \$50 million. Apple's Chief Information Officer, Niall O'Connor

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⁵ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 6 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

⁶ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 7 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

⁷ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 8 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

describes Apple's global implementation of SAP as "one of the largest single instances of SAP in the world and the backbone for Apple's world-class operational efficiencies." 8

- 33. Apple implemented three SAP R/3 modules from SAP SE (www.sap.com): **Finance, Sales & Distribution and Manufacturing.** SAP described the capabilities of each of these modules as follows:
 - a. Financial Accounting: This module entails the support of all the planning, administration and processing responsibility of human resource departments. Company specific organization structures and administrative policies are integrated into the standard applications, complete with a multi-level, graded authorization concept to control access to sensitive data.
 - Asset Management allows users to monitor assets such as office machines, computers, software; does fixed asset reporting, maintenance and depreciation for companies on a worldwide basis.
 - *Financial Accounting* comprised of general ledger, accounts receivable/payable, legal consolidation, financial control, profitability analysis, business planning and coordination.
 - Controlling (Management Accounting) comprised of cost center accounting, activity based costing, order and project accounting, product accounting, profitability analysis, profit center accounting, and corporate management, which combined, coordinate planning, monitoring and management of business activities.
 - b. Sales and Distribution: The Sales and Distribution module includes components for sales, shipping, billing, sales support and sales information that

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⁸ "About ITLG – Niall O'Connor – Apple," *Irish Technology Leadership Group*, available at https://www.itlg.org/advisory/Niall-OConnor.php.

⁹ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 9 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

¹⁰ "Vendor Profile – SAP AG, Inc.," Workgroup Strategic Services," September 21, 1995, *available at* http://www.wgss.com/reports/sapreport/sap.htm.

provides real-time, on-line access to sales information while streamlining order entry, delivery and billing functions. This module can be integrated with SAP's Materials Management and Production Planning modules.¹¹

- c. Manufacturing and Logistics: Manufacturing and Logistics supports an integrated information chain for the procurement of manufacturing and sales and distribution of goods and services.
 - Materials Management covers tasks within material planning through purchasing to inventory and warehouse management.
 - Plant Maintenance supports activities associated with planning and performing repairs.
 - Production Planning and Control manages all phases of manufacturing.
 - Quality Management plans and implements inspection and tests for quality with manufacturing.
 - Sales and Distribution supports sales order processing from inquiry to processing to shipping and invoicing. ¹²
- 34. Prior to SAP, Apple's "[e]xisting system was fragmented, over 16 disparate legacy systems." Apple's vice president of Information Systems & Technology, Niall O'Connor, was reportedly "a strong believer in SAP R/3's capabilities of achieving high

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¹¹ "Vendor Profile – SAP AG, Inc.," Workgroup Strategic Services," September 21, 1995, *available at* http://www.wgss.com/reports/sapreport/sap.htm (emphasis added).

¹² "Vendor Profile – SAP AG, Inc.," Workgroup Strategic Services," September 21, 1995, *available at* http://www.wgss.com/reports/sapreport/sap.htm.

¹³ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 5 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

level of integration."¹⁴ Niall O'Connor has been Apple's Chief Information Officer since

- ii. 1999/2000 Oracle Handheld Checkout System for Apple Stores "tabulate[s sales] every four minutes"
- 35. In or about 1999, Oracle was developing software for the handheld checkout system that Apple was developing for the new Apple stores. 16
- 36. With Oracle's software, Apple had "instant information on how to integrate manufacturing, supply, and sales channels".

By 2004 Apple stores were averaging 5,400 [visitors] per week. That year the stores had \$1.2 billion in revenue, setting a record in the retail industry for reaching the billion-dollar milestone. Sales in each store were tabulated every four minutes by [Oracle CEO Larry] Ellison's [Oracle] software, giving instant information on how to integrate manufacturing, supply, and sales channels.¹⁸

37. Based on Steve Jobs's comments about Apple's store in Manhattan on Fifth Avenue, Apple has access to significant data—not just about Apple's retail stores, but also data related to other retailers:

"This store gross more per square foot than any other store in the world," Jobs proudly noted in 2010. "It also grosses more in total—absolute dollars, not per square foot—than any other store in New York. That includes Saks and Bloomingdale's."

. .

In July 2011, a decade after the first ones opened, there were 326 Apple stores. The biggest was in London's Covent Garden, the tallest in Tokyo's Ginza. The average annual revenue per store was \$34 million, and the total net sales in fiscal 2010 were \$9.8 billion. 19

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¹⁴ Sathwik Nikhil, "SAP Implementation at Apple Computers, Inc.," Slide 5 of 23, *available at* http://www.slideshare.net/Rozy65/final-ppt-4560293.

¹⁵ "About ITLG – Niall O'Connor – Apple," *Irish Technology Leadership Group*, available at https://www.itlg.org/advisory/Niall-OConnor.php.

¹⁶ Walter Isaacson, Steve Jobs, (New York: Simon & Schuster Paperbacks, 2011), 372.

¹⁷ Walter Isaacson, Steve Jobs, (New York: Simon & Schuster Paperbacks, 2011), 374.

¹⁸ Walter Isaacson, *Steve Jobs*, (New York: Simon & Schuster Paperbacks, 2011), 374.

¹⁹ Walter Isaacson, Steve Jobs, (New York: Simon & Schuster Paperbacks, 2011), 376.

iii. March 2010 – Apple's IS&T Sr. Developer, Jake Logan, Describes Apple's SAP Implementation as Providing Real-Time Information

38. A March 2010 YouTube video captures Apple's Sr. Developer, Apple Information, Systems & Technology ("IS&T"), Jake Logan, describing Apple's SAP system in detail. Part I²⁰ identifies the 9 interfaces at Apple to the SAP system—at 00:00-01:55 of the video. Notably, Mr. Logan makes clear that the SAP database "is the system of record for order management at Apple." Id. at 00:46-47 of the video. In addition, one of the nine interfaces Apple uses is SAP's BW/Business Intelligence module. This is SAP's terminology for a data warehouse, which SAP refers to as a "Business Warehouse," and which stores all of Apple's business data and can be accessed to produce custom reports by the "business intelligence" portion of the SAP system. Part II²¹ at about 2:00 discusses the graphical user interface ("GUI"), and beginning at about 6:00 discusses specific examples of this business intelligence capability used by Apple. He indicates that this software provides the ability, for example, to "drill down" into Apple's sales data, to "slice the data in different ways," and to determine "where sales are up or sales are down." The accompanying slide on the video states that this software permits Apple personnel "to mine sales data to gain insight into Apple's business."

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²⁰ Jake Logan [Sr. Developer, Apple Information, Systems & Technology], "The Many Faces of SAP at Apple, Part I," *Apple*, March 10, 2010 (https://www.youtube.com/watch?v=PaSVHvHEbQk).

²¹ Jake Logan [Sr. Developer, Apple Information, Systems & Technology], "The Many Faces of SAP at Apple, Part II," *Apple*, March 10, 2010 (https://www.youtube.com/watch?v=XcA1X6Jf7_Q).

- iv. Recent Apple Job Postings on *LinkedIn* Demonstrate that Apple has "Real time Reporting Requirements" and Capabilities
- 39. Apple has a "Worldwide Product Marketing Business Management group" that "maintain[s] analytics tools and reporting, create[s] actionable intelligence, and play[s] a key role in supporting strategic decisions at Apple." Apple describes the "Business Analyst" position as follows:

The Business Analyst will serve as a key member of the business management team, looking to delve deep into various data sets for the purpose of creating actionable intelligence and influencing strategic decisions of Apple. This position will require working with multiple, large data sets and finding the optimal intersection that facilitates actionable strategic and operational insights. The individual is expected to work with the multiple levels of the Product Marketing, Research, Finance, Retail, and iTunes teams, to architect, build, and maintain analytics tools and provide timely and insightful reporting.²³

- 40. Apple claims that it has a "global analytical environment" and "a robust reporting roadmap that continues to push the boundaries of reporting." Apple also claims that its "BI Engineering team" is "one of the largest data processing and analytics team!" ²⁵
- 41. Other recent Apple job postings on *LinkedIn* provide additional evidence that Apple has "real time reporting requirements" and capabilities. For example, a November 16, 2015 "HANA Engineer" job description attached as **Exhibit G** states that Apple's "Global Business Intelligence (GBI) team within Apple's IS&T organization has a large Enterprise Data Warehouse (EDW) to support analytical and reporting needs." The

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²² "Job Description – Business Analyst / Financial Analyst," *LinkedIn*, November 21, 2015, *available at* https://www.linkedin.com/jobs2/view/100210216?trk=jobs_jserp_job_listing_text.

²³ "Job Description – Business Analyst / Financial Analyst," *LinkedIn*, November 21, 2015, *available at* https://www.linkedin.com/jobs2/view/100210216?trk=jobs_jserp_job_listing_text.

²⁴ "Job Description – Product Manager – Global BI," *LinkedIn*, October 16, 2015, *available at* https://www.linkedin.com/jobs2/view/78991390?trk=jobs_jserp_job_listing_text.

²⁵ "Job Description – HANA/BW Engineer," *LinkedIn*, November 5, 2015, *available at* https://www.linkedin.com/jobs2/view/83900646?trk=jobs jserp job listing text.

²⁶ "Job Description – HANA Engineer," *Apple*, November 16, 2015, *available at* https://www.linkedin.com/jobs2/view/86719046?trk=jobs_jserp_job_listing_text.

HANA Engineer's "Key Responsibilities" include: "Design applications to deal with real time reporting requirements."²⁷

- v. Apple's Documents Produced in this Litigation Demonstrate that Apple Maintains and Produces Intra-Quarter Sales Information During the Ordinary Course of its Business
- 42. As noted above, Apple's internal systems capture real time data on orders and sales, and allow Apple personnel to create reports based on the information in its data warehouse. Numerous documents produced in this litigation, as well as Apple's own public statements, demonstrate that Apple has the ability to get near real-time sales data and that, when it wants to, Apple can *and does* produce sales information for periods of less than a full quarter in the ordinary course of its business. For example:

 - c) The Apple press releases discussed at ¶ 9 demonstrate that Apple has real time sales reporting capabilities.
- 43. As a public company, Apple could not make such announcements unless its internal systems reliably capture and report its sales data, as the facts above shows they do.

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²⁷ "Job Description – HANA Engineer," *Apple*, November 16, 2015, *available at* https://www.linkedin.com/jobs2/view/86719046?trk=jobs_jserp_job_listing_text.

²⁸ See May 11, 2015 Lawton Report, ¶ 325(a).

²⁹ APL-WARF_0001415490.

 $^{^{30}}$ See May 11, 2015 Lawton Report, ¶ 326.

The foregoing documents simply underscore that Apple has the ability to produce reports on sales for periods as short as a weekend, when it wishes to do so. There is no reason that same capability could not be used to produce an accounting for use in connection with determining supplemental damages in this lawsuit.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is a true and correct statement of facts known to me, methods used and opinions formed by me, and that this declaration was executed on November 23rd, 2015.

Catharine M. Lawton

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